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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,060	07/23/2001	Mieko Sakai	2001_0489A	9676
513	7590	10/15/2003	EXAMINER	
WENDEROTH, LIND & PONACK, L.L.P.			WYROZEBSKI LEE, KATARZYNA I	
2033 K STREET N. W.			ART UNIT	
SUITE 800			PAPER NUMBER	
WASHINGTON, DC 20006-1021			1714	

DATE MAILED: 10/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/830,060	SAKAI ET AL.	
	Examiner	Art Unit	
	Katarzyna Wyrozewski Lee	1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 September 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 6-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 6-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other:  |

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In view of the amendment filed on 8/20/2003 following final office action has been necessitated.

The amendment filed did not overcome the prior art of record. The rejections of record are therefore restated in this office action.

### *Claim Objections*

1. Claim 21 is objected to because of the following informalities: one of the components of the claim 21, which is the aggregate component, is pottery. Per definition from Websters dictionary term pottery means pots or pans made from ceramic material. The examiner is not clear in this case how a pot can be used as an aggregate in another composition. Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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3. Claims 1, 6, 7, 10, 14, 17-19 are rejected under 35 U.S.C. 102(e) as being anticipated by IITMAN (US 5,882,560).

The discussion of the disclosure of the prior art of IITMAN from paragraph 5 of the office action mailed on 5/21/2003 is incorporated herein by reference.

***Claim Rejections - 35 USC § 103***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 8, 13, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over ITTMAN (US 5,822,560).

The discussion of the disclosure of the prior art of ITTMAN from paragraph 6 of the previous office action mailed on 5/21/2003 is incorporated here by reference.

Newly added claims 20 and 21 contain limitation that the aggregate is a metal, natural stone or an ore (for claim 20) and granite, marble, rock, quartz, feldspar, mica, molten silica, glass, metal and pottery. The prior art of ITTMAN discloses that the stratified silicates, which include mica, phyllosilicate of the present claim 21

6. Claim 9, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over ITTMAN (US 5,882,560) in view of SHOCK (US 6,177,179).

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The discussion of the disclosure of the prior art of ITTMAN and SHOCK from paragraph 8 of the previous office action mailed on 10/23/2002 is incorporated here by reference.

Newly added claims 20 and 21 contain limitation that the aggregate is a metal, natural stone or an ore (for claim 20) and granite, marble, rock, quartz, feldspar, mica, molten silica, glass, metal and pottery. The prior art of SCHOCK discloses quartz, metal oxides, granite, silica, glass and the like that further satisfy newly added claims of the present invention.

7. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over ITTMAN (US 5,882,560) in view of ASHTON (US 6,117,179).

The discussion of the disclosure of the prior art of ITTMAN and ASHTON from paragraph 9 of the previous office action mailed on 10/23/2002 is incorporated here by reference.

8. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over ITTMAN (US 5,882,560) in view of COHEN (US 6,432,329)

The discussion of the disclosure of the prior art of ITTMAN and COHEN from paragraph 10 of the previous office action mailed on 10/23/2002 is incorporated here by reference.

9. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over ITTMAN (US 5,882,560) in view of SHOCK (US 6,117,179).

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The discussion of the disclosure of the prior art of ITTMAN and SHOCK from paragraph 8 of the previous office action mailed on 10/23/2002 is incorporated here by reference.

Claims 11 and 12 have been objected to as they contain allowable subject matter but depend on otherwise rejected claim. The prior art of record does not provide for limitations of luminous or fluorescent material and for the limitation of flame retardant.

10. In the amendment filed on 8/20/2003 the applicant has argued following:

a)

Applicants take the position that the Ittman et al. reference fails to disclose or suggest a composite material having the particular combination of features as set forth in amended claim 1. It is this combination of features which gives particularly good results in terms of achieving a high hardness, soft composite material having the surface Vickers hardness and radius of curvature R values as recited in claim 1. There is no suggestion in the reference that the particular combination of claimed components in the claimed amounts should be selected, or that such a combination of claimed components/amounts would lead to a composite material having the recited properties.

With respect to the above argument, the examiner disagrees. The independent claim of the present invention asks for: at least 60 wt% of aggregate having 2-70 mesh particle size; fine particles having mesh of 100 or less and 40% by weight of less of organic component. Broad claim like this one encompasses any inorganic compounds that fit the particle size description including those capable of forming an aggregate and the amount as well as any organic compound that satisfies the amount of 40% or less. The property of Vickers's hardness and radius of curvature of the formed material when bent are considered properties, wherein properties are inherent, if composition of the prior art satisfies the present claims.

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To further elaborate, the applicants in the independent claims stated that the organic component is curing resin and in the further claims that this resin is methacrylate resin. This is the resin that the prior art of ITMANN discloses.

The applicants further state that there is no suggestion as to the amounts utilized in the prior art of ITMANN. The examiner would like to draw applicant's attention to the Abstract of the prior art of ITMANN, which in fact is not the only place, where the amounts are discussed. In the Abstract, the prior art of ITMANN discloses that the silicate particle is utilized in amount of 1-35 pbw and non-metallic filler is utilized in amount of 0-75 pbw, wherein total is more than 60 pbw. Col. 2 (lines 5-15) of ITMANN further teach that the amount of the non-metallic filler is preferably 40-75 pbw and the silicate is 1-35 pbw. With respect to the polymer component, the prior art of ITMANN reports it most of the time in amount of pre-polymer that will be used, however is col. 2, line 30-35 discloses that the amount of the polymer can be about 5 wt %. The example 1 of the prior art of ITMANN discloses formation of polymer (104 g of monomer) in presence of silicate (280g), wherein the specification discloses that residual monomer is less than 1 %. Then in the example additional 6 g of polymer is added with another 10 g of silver pigment. Total amount of the filler is then 290 grams and polymer at most 110 grams, which is at most 37 pbw. Outside of small amounts of additives, the amounts of polymer and filler, the ranges of the prior art are well within the ranges of the resent invention .

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b) Regarding newly added claims 20 and 21.

Furthermore, with regard to new claims 20 and 21, the component of the Ittmann et al reference which the Examiner relies on as corresponding to the aggregate component of the presently claimed composite material, is the metallic-appearing particles of a platelet-like stratified silicate (SS).

which is a special component that is "inventively employed" in the reference (column 3, lines 6-11). On the other hand, new claims 20 and 21 set forth above are directed to aggregate components which are quite distinct from this special platelet-like stratified silicate employed in the reference. There is no suggestion in Ittmann et al. which would lead one of ordinary skill in the art to substitute the aggregates of claims 20 and 21 for this special component of the reference.

Claims 20 and 21 are not independent claims, and therefore the prior art of ITMANN still applies against present claims. In addition, these claims stand rejected by prior art of ITMANN alone and prior art of ITMANN in view of SCHOCK, wherein the prior art of. The prior art of record as applied against present claims, still teaches the fillers of the present invention.

The prior art of ITMANN is utilized to make granite like smooth articles that resemble granite. SCHOCK also discloses making granite like composition for making floor coverings and wall panels.

c) With respect to the other prior art rejections of record the applicants stated the following:

The comments set forth above concerning the Ittmann et al. reference are considered to be equally applicable to each of these rejections. Therefore, even if, as concerns the rejections based on a combination of references, the references were combined in the manner suggested by the Examiner, the result of such combination would still not suggest the presently claimed invention as set forth in the dependent claims, for the same reasons as set forth above in connection with the rejection of claim 1 based on Ittmann et al.

The above argument, although does traverse the rejections of record in a very short manner, it does not state why it would not have been obvious to combine the prior



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art of record the way it has been combiner. Therefore the rejections of record are not overcome.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katarzyna Wyrozebski Lee whose telephone number is (703) 306-5875. The examiner can normally be reached on Mon-Thurs 6:30 AM-4:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (703) 306-2777. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

*Katarzyna Wyrozebski Lee*  
Katarzyna Wyrozebski Lee  
Primary Examiner  
Art Unit 1714

October 13, 2003